

Negative Photoeffects in Se iconductors, by F.
Stockmann, 18 pp.
GERMAN, per, Z. Phys., Vol 143, 1955, pp 348-356.
P911386967
AEC UCRL-TRANS-10129

Sci-Physics
Dec 67

346,214

Measurement of the Critical Supersaturation
in Vapors with the Diffusion Cloud Chamber,
by J. P. Franck, H. G. Hertz.

GHILMAN, per, Zeit. für Physik, Vol 143,
pp 559-590, 1956 9229594
AEC AT-Tr-93

Sci-ES&A
Nov 65

291,971

The Structure of Thin ~~MX~~ Salt Layers - Condensed at Low
Temperature - of First Alkali Hlides, by Wilhelm Ruthl,
10 pp.
GERMAN, p~~er~~, Z fuer Physik, Vol CXLIII, 1956, pp 591-604.
Q 9691137

ACSI I-2473-E
ID 2232439

NTC 70-23254

Sci - Phys--
Mar 64

251,365

The Structure of Thin Salt Layers Condensed at Low
Temperature - of Second Halides of Heavy Metals, Cu, Ag
and Tl, 13 pp.
GERMAN, per, Z fuer Physik, ~~WIDEXONX~~ VOL CXLIII,
1956, pp 605-622.

ACSI I-2493-F
ID 2232439

Sci - Phys-12
Mar 64

251,366

Studies on Thermoelements From the Rhenium-
Iridium System, by G. Haase, G. Schneider, 7 pp.

SEIBER, Ger, Z Natur Physik, Vol XLIV, 1956,
pp 286-293.

13815
ACC tr. ~~13815~~

Sci - Phys
Jan 60

104,889

Generation of a Stream of Hydrogen Atoms With
Unidirectional Nuclear Spin, by G. Claveritzer,
R. Flotzmann, H. Schopper, 9 pp.

GERMAN, pt, Z Physik, Vol CXLIV, 1956, pp 336-342.

AEC

ARR-Lib Tr 768

Sci - Nuc Phys

Sep 58

73, 786

Hittmaier, O.
FIELD MODEL, COUPLING AND POLARIZATION OF
SCATTERING PROTONS (Selbstwechselwirkung und
Polarisation von Streuung-Protonen) tr. by D. A. Sin-
clair. 1981, 8p. 5 refs. [NRCC] Technical trans 941.
Order from NRCC \$0.50 NRCC C-3591

Trans. of Zeitschrift für Physik (West Germany) 1956,
v. 114, p. 449-454.

(Nuclear Physics--Nuclear Reactions, TT, v. 5, no. 11)

61-22101

1. Nuclear reactions--
Analysis
2. Protons--Polarization
3. Deuteron--Nuclear
reactions
- I. Hittmaier, O.
- II. NRCC TT-941
- III. NRCC C-3591
- IV. National Research
Council of Canada

159084

Office of Technical Services

Collective and Individual Degrees of Freedom in
Helium II., by W. Brenig, 38 pp.

GERMAN, per, Z Physik, Vol CXLIV, 1956, pp 488-508.

ABC UCRL-Trans-681(L)

Sci - Phys
Oct 61

171, 225

List 60

Unified Dynamics and Thermodynamics of a Plasma,
Plasma, by H. Maack, Th. Peters, 30 pp.

GERMAN, per, Z. fuer Physik, Vol CXLIV, 1956,
pp 506-611. CIA 9031469

Rand Corp. T-50

Sci - Phys

Aug 58

71,369

New Method of Measuring Extremely Small Ion
Current in High Vacuum, by W. Schutze, P.
Bernhard.

GERMAN, per, Z. fuer Physik, Vol. CXLV,
No 1, 1956, pp 44-47.

CSIRO

SHA 62-16300
196,425

Sci - Phys
May 62

Mechanism of the Energy Transfer in the
Sensitized Fluorescence of Organic Mixed
Crystals, by H. C. Wolf, 7 pp.

GERMAN, per, Z. fur Physik, Vol CXLV, 1956,
pp 116-124. CIA 9004653

A.C.B.I.L. Tr 887

Sci - Chem; Physics
May 57 CTS/dex

47, 532

Microscopic Dispersion and Lattice Disorder in Silver
Bromide Crystals, by W. Zieten.

GERMAN, per, Z. Phys., Vol CXLV, No 1, 1956, pp 125-
140.

ASIJF-GB-131

Sci

Aug 58

71,006

Electron Diffraction Photographs of Thin X Metal Layers at
Low Temperatures, by Hagen Bulow, Werner Buckel, 8 pp.
GERMAN, per, x Z fuer Physik, Vol CXLV, 1956,
pp 141-150. ~~RD 738~~ 9691138

ACSI I-2493-G
ID 2232439

NTC 70-23253

Sci - Phys
Mar 64

251,367

Hall Effect and Electrical Resistance of InSb in
Strong Magnetic Fields and at High Pressures, by
J. Gieslissen, K. Klitzing, 5 pp.

GERMAN, per, Z Physik, Vol CXLV, 1956, pp 151-155.

BIA 57-2338

May 58

63,197

On the Mechanical Behaviour of Si-Crystals
Unterlagen, by H. F. Matare.

GERMAN, per, Z. fuer Physik, Vol X CXLV,
1956, pp 206-234.

OSIRO

Sci - Phys
Jul 62

207,666

Electron Theory Investigations on Vacancies in
Metals: The Association Energy of Vacancy Pairs
in Monovalent Metals as in Transition Metals,
by A. Seeger.

GERMAN, per, Z. Physik, No 145, 1956. pp 161-183.

*NBS TT 70-57514

Sci-Mat
Aug 70

62-18263

Haase, G. and Schneider, G.
INVESTIGATIONS ON THERMOELEMENTS OF THE
SYSTEM IRIIDIUM-RHENIUM. [1962] 10p. (figs.
omitted) 5 refs.

Order from SLA \$1.10

62-18263

I. Haase, G.
II. Schneider, G.

Trans. of Zeit[schrift] für Physik (West Germany) 1956,
v. 144, p. 236-262.

DESCRIPTORS: *Temperature sensitive elements,
*Thermocouples, Crystals, *Rhenium, *Iridium,
Tungsten, Thermoelectricity, High temperature
research.

The thermopotentials of Ir, Re, and of alloys of the sys-
tem Ir-Re, against W were measured up to 2450°C. The
upper limit of usefulness of thermoelements of this kind
is apparently between 2000 and 2400°C., depending on
the combination. Systematic studies covering the entire
range of concentrations showed the following to be a
(Physics--Thermodynamics, TT, v. 9, no. 3) (over)

Office of Technical Services

On the Transmission of Monochromators, by G. Bauer.

GERMAN, no per, Z Phys. Vol CXLV, 1956, pp 279-2 300.

DSIR/28791/CI

Sci - Physics

Sep 57

52, 385

Continuum Theory of Dislocations, by E. Kroner and G.
Rieder.

GERMAN, per, Z. Phys. Vol. ~~CLV~~ CLV, 1956, pp 424-429.

ASLIB-GB4

Sci

Aug 58

71,998

Saturation Magnetization of Nickel Under
High Hydrostatic Pressure, by
K. H. von Klitzing.
GERMAN, per, Zeitschrift fuer Physik,
Vol 146, 1956, pp 59-64
NTC 72-12351-20C

July 72

63-14054

Waldelich, Wilhelm.
THE QUESTION OF A AgBr STRUCTURAL CHANGE
IN THE FORMATION OF THE LATENT IMAGE.
7 Apr 63, 13p. 14 refs.
Order from SLA \$1.60

63-14054

I. Waldelich, W.

Trans. of Zeitschrift für Physik (West Germany) 1956,
v. 146, p. 505-514.

DESCRIPTORS: *Photographic images, *Silver com-
pounds, *Bromides, Crystal lattices, *Photographic
chemicals, Photographic film, X-ray photography,
Photography, Photographic emulsions

In the present work, a search is made with monochro-
matic X rays for signs of a B 3 structure in Debye-
Scherrer diagrams. Photographic films that were
moved along through the primary beam to avoid greater
exposure to the X rays during the Debye exposures
were used as the sample. In each case, photographs
(Materials--Photographic, TT, v. 10, no. 4) (over)

Office of Technical Services

Unified Dynamics and Thermodynamics of A
Thermal Plasma, by H. Maicker, Th. Peters,
40pp.

GERMAN, per, Zeitschrift fur Physik, Vol 144,
1956, pp 586-611.

CFSTI TT-64-71351.

322,679

Sci - Physics
Apr 67

61-16459

J. Stroesche, H.

176527

Office of Technical Services

Stroesche, H.
THE EFFICIENCY OF CADMIUM SELENIDE LAY-
ERS AT SELENIUM RECTIFIERS, II. [1961] 20p.
(5 figs. omitted) 34 refs.
Order from SLA \$1.60

61-16459

Trans. of Zeitschrift für Physik (West Germany) 1956,
v. 145, p. 597-610.

DESCRIPTORS: *Selenium rectifiers, *Selenides,
Cadmium compounds.

It was found experimentally that the two structures of
the CdSe, i. e. the cubic and the hexagonal one, behave
differently with respect to placement of the excess Cd.
At the cubic CdSe the placement of excess Cd in the
lattice will cut down the electric resistance more than
this is the case for the hexagonal CdS. One may raise
or lower at will the electric resistance by tempering
the samples in Se or Cd vapor, respectively. Accord-
(Engineering - Electrical, TT, v. 6, no. 6) (over)

english title unknown, by H. Rollnik.
GERMAN, per, Zeit. fur Physik, Vol 145, 1956,
pp 639-653.
*NASA TT F 13,302

oct 70

On an Experimental and Theoretical Determination of
the Thermal Conductivity of the Plasma in a High-
Current Carbon Arc, by R. Wienecke, 24 pp.

GERMAN, per, Z Physik, Vol CXLVI, 1956, pp 39-58.

AEC Tr SCL-T-48

Sci - Phys

Sep 58

73, 739

Electron Theory Investigations about Vacancies
in Metals: Influence of Dislocations on Crystals
Layers and Applied Problems, by H. Stehle.
GERMAN, per. Z Physik, No 146, 1956, pp 217-241.
*NBS TT 70-57513

Sci-Phys
Aug 70

on the Disposition of the ...
Operations Commanding Officer ...
Harter, E. Ziegler.

GEIGAN, per, Z. Tuer Hays, Vol. 6, 1956, pp 281-294.

COING

Ref - Phys
Jul 62

207,608

VELOCITY ANALYSIS OF LAVAL BEAMS, BY
E. W. BECKER, W. HENKES, 15 PP.

GERMAN, PER, Z FLIER PHYSIK, VOL CXLVI,
1956, PP 320-332. 9082374

AEC TR-4792

SCI - PHYS

NOV 61

173,205

Beams From Condensed Atoms and Molecules in a High
Vacuum, by H. W. Backer, K. Bler, U. Hankes, 2 pp.

GERMAN, per, Z fuer Physik, Vol CXLVI, 1956,
pp 333-338. 9093605

AEC Tr-4790

Sci - Phys
Dec 61

177, 405

On the Ion Reflection and Secondary
Electron Emission in the Collision of
Alkali Ions with Pure Molybdenum Surfaces,
by C. Brunner.

GERMAN, par, Zeitschrift fuer Physik,
Vol 147, 1956, pp 161-83.
SIA TT-66-11066

Sci 67

332, 211

A New Microbalance of Quartz for Work Under
Highest Vacuum, by Herbert Mayer, Dr Klaus
Behrmdt, 10 pp.

GERMAN, per, Z fuer Physik, Vol CXLVII, No 4,
1957.

NACA CN-52538

Sci - Engr

50,528

Aug 57

Gas Thermometry at High Temperatures I. A New
Method of Gas Thermometry, by H. Moser, J. Otto,
Thomas.

GERMAN, per, Z Phys, Vol CXLVII, 1957, pp 59-75.

DSIR/31028/CT

Sci - Physics
Feb 58

58,840

Gas Thermometry Measurements at High Temperatures.
II. Determination of the Gold ~~Pin~~ Point, by
H. Moser, J. Otto, W. Thomas.

CHEMABE, per, Z Phys, Vol CXLVII, 1957, pp 76-91.

DSIR/31027/CT

Sci - Physics
Feb 58

58,838

For detection and secondary infection diseases. On the
impact of alkali ions on Pure Polybromine Surfaces,
by Gert Brunen, 29 pp.
GEMINANT, par. 2, Ser. Phyaik, Vol. CXLVII, 1957,
pp 101-103. 9228791
SEC-CHNL-Tr-467

Sci-Phys
May 63

279,068

Theory of the Reflection of Positive Ions on
Metallic Surfaces, by Othmar V. Noos, 26 pp.
GERMAN, per, Zeitschrift für Physik, Vol 147,
1957, pp 184-209. F511223567
ARC NP Tr-1538

331,121

Sci - Nuclear Science
Jul 67

Energy Distribution of Secondary Electrons
Released by Protons in Gases, by Erich Blauth.
GERMAN, per, Z. Phys., Vol 147, 1957, pp 228-240.
ANL-Trans-723

July 69

384-709

Absolute β Counting in Samples of Saturation
Thickness, by J. Beintzo, E. Fischbeck, 16 pp.

GERMAN, per, Z fuer Physik, Vol CXLVII, 1957, pp
277-287.

ASAC 13b Tr 810

Sci - Phys

May 59

86,163

Forced Oscillations of a Simple Nonlinear
System. I. The Differential Equations and
Their Steady-State Solutions, by Werner Braunbek,
15 pp. UNCLASSIFIED

GERMAN, per, Z. fuer Physik, Vol CXLVII, 1957, pp
297-306.

RACA N-57659

Sci - Phys

58,472

Feb 58

Haken, H.
CALCULATION OF THE ENERGY OF THE
EXCITON GROUND STATE IN A POLAR CRYSTAL
ACCORDING TO A NEW VARIATIONAL PROCEDURE
OF FEYNMAN, I. [1961] 40p. (39 refs.
omitted) 13 refs.

Order from SLA \$3.60

62-10619

Trans. of Zeitschrift für Physik (West Germany)
1957, v. 147, p. 323-349.

DESCRIPTORS: Particles, Energy, *Crystals,
Lattices, Vibration, Excitation, Quantum mechanics,
Wave analysis, Numerical analysis, Calculus of
variations.

The energy of the exciton ground state in polar,
vibrating crystals is calculated with the, perhaps,
simplest "trial-Schroedinger-equation" which occurs.
(Physics--Solid State, TT, v. 7, no. 9) (over)

62-10619

1. Title: Exciton
I. Haken, H.

Office of Technical Services

Measurement of the False Order Energy of Bismuth and
Gallium Layers at Low Temperature, by Wilhelm Sander, 10 pp.
GERMAN, par, Z fuer Physik, Vol CXLVII, 1957, pp 361-372.
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ACSI I-2493-H

ID 2232439

NTC 70-23252

Sci- Phys
Mar 64

251,368

Thomas, Harry.
OUTER PHOTOELECTRIC EFFECT OF ALKALI
METALS. I. ITS THICKNESS DEPENDENCE FOR
POTASSIUM: RANGE OF THE PHOTON IN THE METAL
[1962] 38 p. 47 refs.
Order from SLA \$3.60 62-16689

Trans. of Zeitschrift für Physik (West Germany)
[1957] v. 147, p. 395-418.

DESCRIPTORS: *Alkali metals, *Photoelectric effect,
*Potassium, Thin films, Volume, *Photons, Distri-
bution, *Plasma physics.

Earlier work was continued by measuring the thickness
dependence of the photoelectric emission of thin layers
of potassium evaporated in highest vacuum onto a
quartz support at low temperature. Measurements were
made at constant irradiation at wave lengths between
(Physics--Solid State, TT, v. 9, no. 2) (over)

62-16689

I. Thomas, H.
II. Title: Its ...
III. Title: Range ...

Office of Technical Services

The External Photoelectric Effect of Alkali
Metals. II. The Spectral Distribution of the
Quantum Yield in Potassium, by H. Mayer,
H. Thomas.
GERMAN, per, Zeitschrift fur Physik, Vol 147,
1957, pp 419-441.
NASA TT R-10,907

GOVERNMENT USE ONLY
Sci-Phgs
Aug 67

338,708

Eifel, A.-W.
OPTICAL INVESTIGATIONS OF POTASSIUM FILMS
OF ATOMIC THICKNESS. [1961] 13p.
Order from ATS \$15.65 ATS-2880G

Trans. of Z[schri]ft (fir) Physik (West Germany)
1957, v. 147, p. 465-460.

ATS-2880G

(Physics--Optics, TT, v. 5, no. 11)

1. Eifel, A.-W. Optical properties
 2. Eifel, A.-W. Optical properties
 3. Eifel, A.-W. Optical properties
- I. Eifel, A.-W.
II. ATS-2880G
III. Associated Technical Services, Inc., East Orange, N. J.

10815

Office of Technical Services

The Dependence of Photoelectric Currents on
the Electric-Field Strength, D. P. Stekhanov,
19 pp.

GERMAN, per. Zur Physik, Vol. XLVII, No 5,
1957, pp 564-565.

SLA 6-14299

Sci
Jan 62
Vol. III, No 10

181, 286

TT-64-16896

Helland, G.
ON THE INFLUENCE OF HYDROGEN ON THE
ELECTRICAL CONDUCTIVITY ON THE SURFACE OF
ZINC OXIDE CRYSTALS. 14p 21re/s.
Order from SLA \$1.60 TT-64-16896

Trans. of Zeitschrift für Physik (West Germany) 1957,
v. 148 [no. 1] p. 15-27.

(Chemistry--Physical, TT, v. 12, no. 5)

I. Helland, G.

Office of Technical Services

On the Relationship of the Characteristic
Energy Losses to Temperature and
Scattering Angle, by G. Meyer.
GERMAN, per, Zeit. fur Physik, Vol 148,
pp 61-71, 1957 9229607
AEC ORNL-Tr-536

Sci-Phys
Oct 65

290,644

Investigations of the Energy Loss of Slow Electrons
in Nitrogen, by Haas, Rudolph, 21 pp.

GERMAN, per, Z. fur Physik, Vol CXLVIII, 1957,
pp 177-191. 9688693

Amer Meteorol Soc T-G-188

Sci - Phys
May 63

231,949

The Piezoelectric Effect in Selenium, by
H. Sobrecht, et al.
GERMAN, Ger, Z. Physik, Vol 140, 1957,
pp 209-17.
ATS 1210-GJ

Sci - Chem Phy
Aug. 67

338,282

Elektronenbeugung Saufnahmen von Neuartigen
Zinn -- Wismit-Legierungen, by H. Bulow.

GERMAN, per, Zeit fur Physik, Vol CXLVIII, 1957,
p 321.

*possibly to be done by
ACSI

Sci -
Apr 63

Observation of Individual Electron Avalanches
and of Their Secondary Processes in Gases,
by J. K. Vogel.

GERMAN, per, Z. fur Physik, No 148,
1957, pp 355-373.

CSIRO

Sci - Phys
Mar 62

189, 289

Electrical Conductivity Measurements on Ag-
Halide Single Crystals, by R. Matajac.
GERMAN, per, Z. Physik, No 148, 1957, pp 454-495.
*NBS TT 70-5743

Sol-Mat
Aug 70

The Microfield in Total Units With Reciprocal
Effect According to Coulomb's Law, by G. Echan,
17 pp.

GERMAN, per, ~~Z. fur Physik~~, Vol CXLVIII, 1957,
pp 593-606. 649795

OTIA 4753
PDD/X-3715

Order Tech. Int. 45
ag. 11

Sci - Phys
Nov 59

102, 113

Supraconduction of Vapor Sprayed Lead Layers Admixed
With Manganese, by Nikolaus Barth, 5 pp.
GERMAN, per, Z fuer Physik, Vol CXLVIII, ~~DOEX~~ 1957,
pp 646-652.

ACSI I-2493-I
ID 2232439

SCI - Phys
Mar 64

~~DOEX~~ 251,369

Die Stabilisierung des Zwischenzustandes der
Supraleitung Durch Kritische Strome, by
W. Bucket, R. Hilsch.

GERMAN, per, Zeit fur Physik, Vol CXLIX, 1957,
p 1.

*possibly to be done by
ACSI

Sci
Apr 63

Meier, H.
QUANTITATIVE INVESTIGATION OF THE SPECTRAL
EMISSION IN PULSED DISCHARGES OCCURRING IN
MERCURY VAPOR HIGHEST PRESSURE ARCS. [1963]
35p 22refa

Order from SLA \$3.60

TT-(4-14180

Trans. of Zeitschrift für Physik (West Germany) 1957,
v. 149 [no. 1] p. 40-61.

TT-64-14130

L. Meier, H.

(Physics, TT, v. 12, no. 1)

Office of Technical Services

Electroluminescence From Diamonds, by Albrecht Fischer,
7 pp.
GERMAN, per, Z fuer Physik, Vol CXLIX, 1957,
pp 107-110. 9696158
Amer Meteorol Soc
T-G-64-37

Sci - Elec
Mar 68

275,054

The Elastoplastic Behavior of a Cationic Exchanger,
by D. Hyslop and J. Schloegl.
GERMAN, per, Z. Phys., Vol 11, 1957, pp 137-49.
AEC ORNL-tr-1663

Sci - Chem
Oct 67

342,341

Schonheit, Eberhardt.
MASS SPECTROSCOPIC INVESTIGATION OF PHOTO-
IONIZATION IN GASES (Massenspektroskopische
Untersuchungen der Photoionisation in Gasen). [1960]
[29 p. 88 refs.
Order from SLA m\$2 70, ph\$4.80 61-10706

Trans. of [Zeitschrift für] Physik (West Germany)
1957, v. 149, p. 153-179.

Mass spectra were photographed for air, nitrogen,
oxygen, argon, water vapor, mercury vapor, and
illuminating gas. The photoionization was produced by
a vacuum spark the light from which was not decom-
posed spectrally. The ionization products which were
found can be explained by simple photoionization,
respectively by dissociation. Compared to oxygen,
nitrogen shows under similar conditions a weaker
photodissociation. For purposes of comparison the
photoionization was investigated also with light which
was filtered through lithium fluoride. (Author)

(Chemistry--Physical, TT, v. 5, no. 9)

61-10706

1. Gas Ionization--Spectro-
graphic analysis
1. Schonheit, E.

151826

Office of Technical Services

Changes in the Holtsmark Profile of the Balmer
Lines in Plasma, by G. Becker, 11 pp.

CXLIX,

GERMAN, per, Z Physik, Vol CXL, 1957, pp 254-
266.

144,

Assoc Tech Serv

67K27G

Sci - Chem

May 59

OSR, V I, No 6

67K 27 G

86,285

English Title Unknown, by Herbert Mayer and
Harry Thomas,
GERMAN, per, Zeitschrift fur Physik, Vol CXLVII,
1957, pp 419-441.
*NASA TT F-10,907

Apr 67

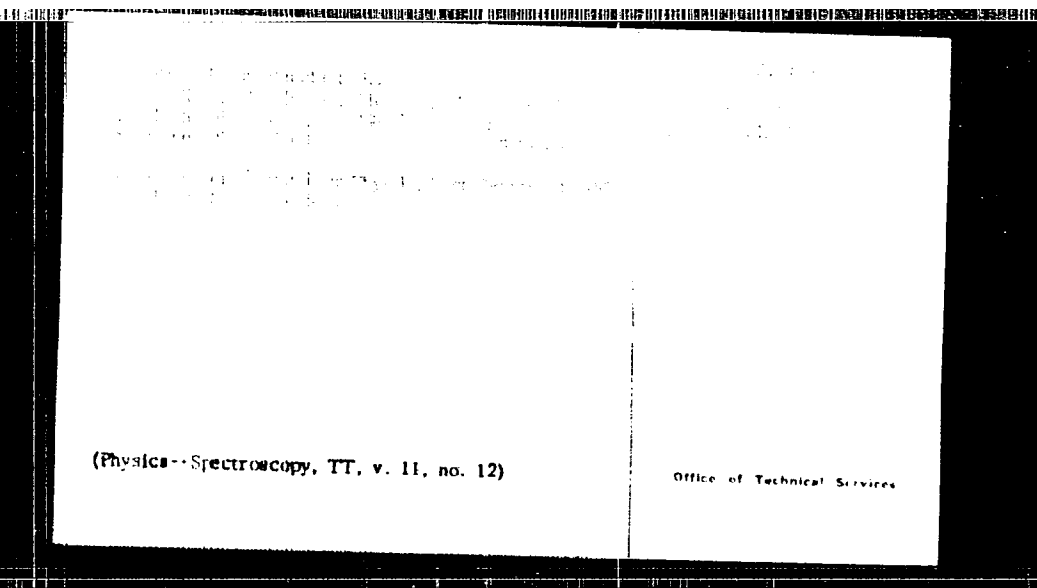
The Condensation Behaviour of Substances With High Boiling Points, by K. G. Gunther.

GERMAN, per, Z fuer Physik, Vol CXLIX, 1957, pp 538-549.

*TIL T-5123

Sci - Chem

Jul 60



Bartels, H. and Beuchelt, R.
ON TYPICAL MANIFESTATIONS IN THE SPECTRUM
OF DENSE PLASMAS. II. SIGNIFICANCE OF THE
RADIATION DENSITY DISTRIBUTION IN DENSE
PLASMAS DURING PULSE DISCHARGING OF MER-
CURY HIGHEST-PRESSURE ARCS. [1963] 28p
Order from SLA \$2.60 TT-64-10907

Trans. of Zelta[chrift] für Physik (West Germany) 1957,
v. 149 [no. 5] p. 603-623.

TT-64-10907

I. Bartels, H.
II. Beuchelt, R.
III. Title: Significance...

(Physics, TT, v. 11, no. 11)

Office of Technical Services

Theory of the Low Temperature Peak of the
Internal Friction of Metals, by Hans Donth, 33pp.

GERMAN, par, Z Physik, Vol CXLIX, 1957, pp 111-130.

AEC 3390

Sci - Phys

Oct 5d

75,587

Physical Processes During Electrical Wire
Explosions, by Erwin David, 18 pp.

GERMAN, GER, I fuer Physik, Vol CL, 1956, 3p
162-171. 647793

AEC/SCL-P-242
OTIA 4754

Sci - Phys

May 59

X-3716

88,046

Voigtlaender-Tetzner, G.
ON THE THEORY OF THE X-RAY DISTRIBUTION
CURVES FOR LIQUIDS AND AMORPHOUS SUB-
STANCES. [1960] [29]p. 35 refs.
Order from SLA ml\$2.70, ph\$4.80 61-10655

Trans. of Zeitschrift für Physik (West Germany)
1958, v. 150, p. 215-230.

The statistical frequency distribution for liquids and amorphous substances is obtained experimentally, by a Fourier transformation of X-ray scattering intensities. It is impossible to avoid a cut-off effect, which distorts the "radiographic distribution curve" so obtained in a characteristic manner. The degree of distortion depends on the magnitude of the statistical deviations of the atom sites in the irradiated volume and on the limit of measurement of the scattering intensity. In order to examine these influences, the equation for scattering intensity in liquids and amorphous substances is derived. The Fourier transform (Physics--Theoretical, TT, v. 3, no. 9) (over)

61-10655

1. X-radiation--Scattering
 2. Liquids--X-ray analysis
 3. X-ray diffraction analysis--
Theoretical corrections
1. Voigtlaender-Tetzner, G.

151810

Office of Technical Services

On the Appearance of Jets in Carbon Arcs of a High
Current Intensity, Part I., by R. Wienecke, 18 pp.

GERMAN, per, Z Physik, Vol CL, 1958, pp 231-241.

ABC-tr-3737

Sci - Phys
Aug 59

94.728

Influence of Hydrostatic Pressure on the
Magnetizability of Au_2Mn , by K. H. Von
Klitzing.

SECRET

GERMAN, per, Zeit fur Physik, Vol 150,
1958, pp 409-414.

MIT/LIN

(219)-68-380-GELL

A&C NP Tr: 1286 (unclass)

Dec 68

354,737

The Influence of Impurity Surface Films on Structural
Changes of Thin Evaporated Metall Films During
Annealing, by K. J. Hanszen, 21 pp.

GERMAN, per, Zeitschrift fur Physik, Vol CL, 1958,
pp 527-550. (9202875)

A.C.S.I.L. Tr 1221

Sci - Phys
Apr 63

926, 532

The Line Profiles of Thermally Excited Helium
Lines, by H. Hulff.
GERMAN, per. Zeit Physik, Vol CL, 1958,
pp 614-631,
NASA TT F-10,255

Sci-Phys
Oct 66

312,259

U. S. GOVERNMENT USE ONLY

Kranz, J. and Drechsel, W.
OBSERVATION OF THE WEISS REGIONS IN POLY-
CRYSTALLINE MATERIALS BY INCREASED MAG-
NETO-OPTICAL KERR ROTATION. [1963] 11p. 4 refs.
Order from SLA \$1.60

63-14690

Trans. of Zeitschrift für Physik (West Germany)
1958. v. 150. pp. 632-639.

DESCRIPTORS: *Ferromagnetism, Crystals, *Do-
mains (Crystallography), Visibility, *Magneto-optic
effect, *Zinc compounds, Sulfides, Thin films, Vapor
plating.

A ZnS layer of specified thickness is vaporized on a
polished ferromagnetic specimen. The magneto-optical
Kerr rotation of linearly polarized monochromatic
light with meridional magnetization of the specimen is
increased by multiple reflections in the layer and by
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RANGE: (Ausbeute von (d, 2n)-Reaktionen im Kontinu-
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(Nuclear Physics--Nuclear Reactions, TT, v. 5, no. 11)

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1. Nuclear Reactions--
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 3. Neutron--Nuclear
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- I. Hittmair, O.
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DESCRIPTORS: *Gold, *Folts, Metal films, Thick-
ness, Electron transitions, *Scattering, *Electrons,
Velocity, Polarization.

1. Title: Mott scattering
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On the Invariant and Causal Solutions of the
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Order from SLA \$1.60

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1958, v. 151, p. 421-430.

DESCRIPTORS: *Nickel, *Vaporization, Thickness,
*Ferromagnetism, Ferroelectricity, *Resistance

The ferromagnetic resistance change in nickel vaporization layers is investigated. The relative magnitude of the total effect (electrical resistance at saturation magnetization parallel to current minus resistance with transverse saturation, divided by the sample resistance) declines with decreasing layer thickness. A (Physics--Magnetism, TT, v. 7, no. 8) (over)

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ELECTRON IRRADIATION (Der Aufbau von Glim-
mentladungs-Polymerisaten Verschiedener Entste-
hungsbedingungen und seine Veränderung durch
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2. Polymers--Effects of radiation
3. Polymers--Molecular structure
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- II. König, H.

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15 pp.

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1958, pp 261-271. 9091772

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Independently of the Wavelength With a NaI(Tl)
Scintillation Counter, by S. Buhl, H. Leutz,
H. Maass, 10 pp.

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[1961] 20p. (refs. omitted).
Order from SIA \$1.60

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Trans. of Zeitschrift für Physik (West Germany) 1958,
v. 152, p. 454-469.

DESCRIPTORS: Single crystals, Ions, Hyperfine
structure, Spectrographic analysis, *Sulfates, *Ethyl
radicals, *Thulium, Thulium compounds, Polarization.

The absorption spectrum of the trivalent thulium ion is
examined in hexagonal $Tm(C_2H_5SO_4)_3 \cdot 9 H_2O$ and in
isomorphous, dilute mixed crystals between 8000 and
4500 Å in polarized light at high dispersion at 4.2 and
800K. From the number and polarization of lines and
from their Zeeman effect the symmetry quantum num-
(Physics--Solid State, TT, v. 6, no. 8) (over)

- I. Title: Zeeman effect
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Trans. of Zeitschrift f[ur] Physik (West Germany)
1958, v. 153, p. 174-185.

DESCRIPTORS: *Silver compounds, Chlorides,
*Single crystals, Electrons, Drift, Photoelectric
effect.

Silver chloride crystals with a different history were
tested with an impulse technique, utilizing the print-
out effect, to determine the drift mobility and the
mean life span of photoelectrons. The life span of the
electrons proved to be depending to a great extent on
the history of the crystals. In the most carefully pre-
pared crystals it was less than 10^{-7} sec.: in crystals
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Angular Distribution in the Photofission of
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SLA 60-10026

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